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*THE NEW
GERMAN
FIELD EXERCISE
1888.*

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THE
NEW GERMAN
FIELD EXERCISE.

PART I.
THE PORTION ON DRILL IN EXTENDED ORDER.

PART II.
ATTACK AND DEFENCE—COMPLETE.

TRANSLATED, WITH THE SANCTION OF
MAJ.-GEN. SIR EVELYN WOOD, V.C., G.C.M.G., K.C.B.,

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ROYAL PRUSSIAN-ENGINEERS).

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PREFACE.

THE issue of the New German Field Exercise marks an important epoch in Military Science.

After careful persual, I came to the conclusion that the portion of Part I., treating of Drill in Extended Order, and the whole of Part II., would make a very welcome book of instruction to many Military Men, and Civilians, who, as Volunteers, take an interest in Military matters. Part II. especially, contains a vast amount of new and original information and instruction on that important part of military duty, how to manage troops in battle. I obtained the sanction of SIR EVELYN WOOD, V.C., G.C.M.G., K.C.B., to make and publish a translation of these parts, and this little volume is the result of my work.

I offer it to the military public with the assurance that it will prove useful to many, and in this opinion I am confirmed by the following words used by a leading military paper: "We may observe that the first two parts of the German Infantry Exercise are of so simple and practical a nature that they might usefully be applied with very slight modification to any of our own forces—the Volunteers, for example, who have not time to acquire all that is contained in our red encyclopædia."

G. J. R. GLÜNICKE.

BEDFORD, *November*, 1888.

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INTRODUCTION.

**The Strength and Composition of different bodies of
Troops.**

The Company of German Infantry, about 250 strong on war footing (120 on peace footing), is divided into 3 divisions called *Züge*, each *Zug* consisting of 2 Half-*Züge*, which are again subdivided into Sections of not more than 6, not less than 4 files each.

The 2 formations for the Company are—

1.—In line.

2.—In column; the 2nd *Zug* leading, the 3rd *Zug* bringing up the rear; 7 paces distance between 2 *Züge*.

The Battalion consists of 4 Companies, and may be in either of the following 3 formations:—

1.—Double Column: 1st and 3rd Companies in front, 1st on the right, both in *Zug* Column; 2nd and 4th Companies behind 1st and 3rd.

2.—Deep Column: the 4 Companies one behind the other, each in *Zug* column, the 1st Company leading.

3.—Broad Column: the 4 Companies in line of *Zug* Columns, 1st Company on the right.

A Regiment consists of 3 (sometimes 4) Battalions, and is mostly formed up in 2 lines; 2 Battalions in Double Column in one line, 1 Battalion (or 2) in Double Column in the other (either 1st or 2nd line).

EXTRACT FROM PART I.

Zug Drill in Extended Order.

GENERAL REMARKS.

1.—When beginning to drill men in extended order, it must not be done without intermediate steps from the instruction of the single man to the instruction of a Zug, but the men must first be practised in files and small groups, when the individual will get to know what he has to do as a part of a greater body. Not only has he to follow the instructions and hints of the leader of the group, but he must also, halting or moving, pay attention to the men next to him.

2.—A single marksman moving freely over the ground can find cover easily, and may therefore look for it; but in case of a Zug, and still more so in case of larger bodies of troops advancing in extended order, this advantage is attained only under certain circumstances, which it is the duty of the leader to make best use of. The harmonious movement of the whole troop must not be disturbed by considerations for the cover of the individual.

For this reason connected movements of skirmishing lines form a very important object of instruction.

The difficulty of executing these movements increases with greater extent and thickness of the line; practice therefore must be started with shorter and looser lines.

Formation of Skirmishing Line.

3.—*Extending* must be done smartly in any direction and from any formation with the greatest order and quietness.

When a Zug halting or moving is to be extended to the front, the word of command is: "*Extend.*" If in extending, the line is to advance towards a point not straight in front, the required direction shall be pointed out in the words of command, e.g. "*Direction towards Windmill—Extend.*"

The centre advances straight on or in the direction pointed out, at first shortening the pace. The other men draw off with half right and half left at a quicker pace, the rear rank man stepping forward to the right of his front rank man, till all the men are at intervals of between 1 and 2 paces. If greater intervals have to be taken, the Zug leader has specially to order it.

The skirmishers advance until a command is given to halt, kneel or lie down. Each group is led by a sergeant or corporal.

4.—If a Zug is to extend without advancing, the word of command is: "*On the line—extend.*"

In this case the centre stands fast, the other men draw off till the proper intervals are gained.

5.—If a retreating Zug is to extend, the men are first turned to the front and then get the Order: "*On the line—Extend.*"

Movements of a Skirmishing Line.

6.—The movements of skirmishers are done at an easy but long step and at the usual marching pace; no doubling is to be done without an order. In all commands the word of caution is omitted.

The movements consist of advancing and retreating Züge, or parts of them, moving to half right or half left, and changing direction of movement by pointing out a certain object to march on. Movements with right or left turn (in file) are to be avoided, exact intervals and perfect dressing are not to be demanded. Before moving, the men must unload and lower their backsights; the leaders of Züge and sections are to be in front of their detachments, next to the enemy. A few sergeants, about one for each Zug, remain behind the skirmishers to superintend the movements.

7.—*Advance by rushes.* After naming the detachment, the Command is: “*Rush—Rise ! Double !*”

On the word “*Rush*” the skirmishers unload or ease springs, put down the backsights, and get ready to rise. The leaders of Züge and sections step out before the front.

On the words “*Rise ! Double !*” the skirmishers rise at once and rush forward. When the new position has been arrived at, the men get the word: *Down !* The distance of each rush is seldom more than 80 yards.

Fire of a Skirmishing Line.

8.—*A skirmishing line fires only when stationary. During movements firing is limited to special cases.*

9.—Frequent practice is necessary to enable each skirmisher to find the place best suited for himself, whilst acting up to the directions of his leaders and taking into consideration the men next to him. A man must not be allowed to shift away from a spot he has once occupied.

10.—*Even when drilling, care must be taken that the sights are properly adjusted.*

11.—*Words of Command* must be as short as possible, and must mention, first the direction, then the object to be aimed at, the range, and finally the kind of fire. There must be no doubt about the object to be aimed at; hostile troops must be named as they are seen from the skirmishing line, *e.g.*: “The guns farthest to the right,” *not* “The left wing of the Battery.”

The words of command have to be repeated by the leaders of the more distant groups.

The word “*Ready*” is omitted, except in case of volleys.

Examples: (1) for volleys: *Artillery on green height, at 800 yards, Ready, Present, Fire, Ready.*

(2) for independent firing: *Skirmishers opposite, at 500 yards, Independent fire.*

12.—*To cease firing.* This is ordered by the word

"*Cease fire*," or by a blow of the whistle, if the voice is no longer audible. When the fire is to be continued at the same object, the command is simply: "*Continue fire*."

If the distance is altered, the command is: "*Change 800 to 900, continue fire*." If within the same range the aim has to be altered, the Zug leader commands, e.g. "*Aim at head*," after eventual use of the whistle.

13.—*The effect of fire* depends not only on a proper management of the rifle, but also on the distance, location, height, breadth, depth and close formation of the object aimed at, as well as on the more or less accurate consideration of atmospheric influences.

The more the fire effect can be concentrated as to time and object of aim, the greater will be the moral influence on the enemy.

14.—*Direction of fire.* The fire must be kept under proper control as long as possible, and the full utilising of the rifles must rest in the hands of the leader. It is easier to control the firing, when a Zug can be kept together as much as possible, when it is separated from the one next by a distinct interval, and when a certain extent of line is fixed to be occupied by it.

If there is no time or opportunity to ascertain distances in front, they must be found out by enquiring from other troops close by, or taken from a map, or fixed by range finders, or by estimation.

The Zug leader ought to keep near him two or three men practised in estimating distances, who will take the range of any object appearing in front and inform the Zug leader of their opinion. They will also

assist him by keeping under observation, not only the object aimed at, but also other parts of the field of action.

A frequent change of the objects of aim is to be avoided, as it results in deconcentrating fire.

15.—*Kind of fire.* The rapidity of firing depends on the object of the combat, the kind of object aimed at, and the quantity of ammunition available. Smoke in front of the firing line and bad light will frequently retard the rate of firing.

When objects are low and at moderate ranges, firing, if even ordered, must be slow. Rapid firing is only advisable at short ranges and against objects, which are but for a short time visible at a favourable elevation. Against Artillery rapid firing will be advisable, even at ranges above 800 yards. Volley firing makes it easy to keep men in hand, to observe where the bullets hit, and thereby to find the proper range. But in the din of battle the voice of the leader cannot carry over an extended Zug, therefore volley-firing must be limited to the commencement of an engagement, and to such times as when one's own men are not under effective fire.

The fire of a skirmishing line is usually independent, with the probability of greater effect in hitting, because the man can aim quietly and can wait for the most favourable moment to deliver his shot.

If in independent fire the leader deems it necessary to quicken or to slacken it, he gives the order: *Fire more quickly* (more slowly) or *Magazine fire!*

To get accustomed to slow firing the skirmisher must

combine with the man next to him: whilst the one is firing, the other observes and may (not *must*) fire after the first has got ready. When the firing has to be rapid, this alternate fire practice ceases; each one fires as soon as he sees his object distinctly, or whenever he thinks the smoke in front of the enemy's line a convenient and profitable aim.

16.—*Fire discipline.* This embraces the conscientious execution of all orders given during firing, as well as the close observance of all rules for the management of the rifle, and for the conduct in battle. Again, it demands quiet perseverance under the enemy's fire, even when it cannot as yet be replied to; care in delivering the shots, best use of natural cover to increase the chance of hitting, constant attention to the leader and to the enemy's movements. The fire must cease as soon as the object disappears, at the sound of the whistle or at the order to cease given in any other way.

The men must be so fully trained in fire discipline that it does not lose its hold on them, even when in course of the action the leader cannot completely direct the fire, and when only individual deliberation or the example of particularly courageous and cautious men exercises an influence on the steadiness of the fire line. In order to awaken and promote independent action, the men must be accustomed to circumstances where the direction of the firing by the officers ceases, and must be instructed how to act in such cases.

17.—*Observing the effect of fire.* By means of field-glasses, officers must always observe where the

bullets strike, and whether the enemy shows in any way that he is suffering by the fire; only by doing so can they ascertain, whether the range is right or whether rectifications are necessary to increase the effect of the fire. If the smoke in front of the line prevents a direct observation from behind the skirmishers, it is advisable to station on the flanks, and if possible, under good cover, special men to transmit their observations to the firing detachment by signals, by calling out, or by means of connecting files.

Skirmishers Closing In.

18.—To bring a Skirmishing line into closed order the word of Command is: "*Collect.*"

The skirmishers gather near the Zug-leader and form in line, each man taking his former position. If the Zug leader is not moving, the men form up at the Order; if the Zug-leader keeps on advancing, the men form up at the Slope.

PART II. THE COMBAT.

A. General Principles.

INTRODUCTION.

1.—It is evidently impossible to represent to a full extent on a Drill-ground the conditions of a field of action. Not only are the losses by fire not realised by the men, but they are also not impressed by the circumstances which in case of war produce an unfavourable influence.

2.—These circumstances will, as a rule, cause a decrease of the ideal capacities of the troops, and the extent of this decrease will be proportional to the moral value of the troops and to the extent of loss sustained.

3.—It is therefore an essential part of the task in times of peace to form and strengthen the morale of the troops, and to use all means which tend towards this object and towards the preservation of discipline. This task is performed to a great extent by maintaining, in all cases, strict order and discipline in carrying out the different formations.

4.—It is not at all in accordance with the requirements of warfare, if anything is omitted on the Drill-ground that would tend to maintain this discipline.

Normal formations need not be strictly adhered to

wherever the changing circumstances of an engagement demand otherwise. But even when different units get mixed up, strict order must not be lost.

5.—The rules of war will therefore be best observed in practising attack or defence, if, after fixing on some imaginary position, those formations are chosen which are best adapted for the attainment of the desired object. The choice must be such, as in case of real war would be necessary for obtaining the greatest effect of one's own armed strength and for diminishing that of the enemy. If these two important points, the former of which is always the most essential, are strictly kept in view, the practice on the Drill-ground should be in accordance with the conditions and rules of actual warfare. The closer this rule is adhered to in extending the practice from sections to companies, and from companies to battalions, the more certainly will the soldier succeed in overcoming the impressions likely to unnerve him in real warfare,

Importance of the Drill Ground.

6.—In the first place the formations prescribed by the Regulations must be practised on the Drill-ground.

7.—In attaining the object in view, the available strength, the time, and the nature of the ground must be taken into account in every engagement.

The first consideration, viz. the available strength, is of most weight and exercises the greatest influence on the arrangements made by the C. O. It rules the choice between attack, defence, or retreat, without

losing sight of the fixed conditions and directions. It is chiefly taken into consideration on the Drill-ground, and makes all practices on the same of the utmost value.

But the employment of formations on the Drill-ground is limited to such practices as represent generally acknowledged tactical principles in using troops and carrying on an engagement. With these objects in view, the nature of the ground must not and cannot be taken into consideration, because the choice of the proper formations is subject more to the particular nature of the assumed object of the engagement, and to the connection with, and relations to other fighting units, than to the condition of the ground actually used.

8.—But this rule does not exclude the possibility of occasionally taking advantage of the nature of the ground as in real warfare. If on a Drill-ground there is an opportunity of practising, in an assumed position, the attack on a hill, village, or edge of a wood, the arrangements for defending a ridge, the advance or the retreat through a defile, it would be refusing to take advantage of favourable circumstances, if full use were not made of the opportunities as offered by the nature of the ground. But as the carrying out of the object of an engagement is of more importance than the making use of the nature of the ground, practices on the Drill-ground for attaining the former object must be more numerous than for the other.

The men at Drill must be told when the Drill-ground is to be used as representing a field of real action.

9.—In thus using the Drill-ground there is naturally a *want of change*. The objects always remain the same for the same garrison. Therefore particular care must be taken that certain fixed formations do not take too deep a root, by which Drilling degenerates into a practice of rules of Tactics applicable only to a certain locality, and finally into mechanical formality.

On the other hand, a desirable change can be given to practices on a Drill-ground, if occasionally it is explained in an intelligible way, how certain features, defines for instance, are supposed to be on the ground for the sake of practice.

10.—In any case, frequent practices in the country are necessary in addition to those on the Drill-ground. If after continual and careful practice on the Drill-ground, a foundation has been laid by which the determining principles and the efficiency of the proper formations are fully understood, then the men will reap the greatest benefit from practices outside the Drill-ground. For the same reasons a change between Drill-ground and country for inspections is advisable.

11.—For practice in fighting formations of all kinds it is expedient to mark the position of the enemy, even if only by a few men and a few flags. Now and then the enemy may be marked by somewhat greater numbers, which would enable one to show the arrangements and movements of their detachments farther in

rear. Also good practice can be had *occasionally* by opposing two detachments of nearly equal strength.

Extended and Closed Formation.

12.—Infantry in full marching order *must* be able to fight and overcome considerable obstacles on any ordinary ground. For this, the Extended Order is the best formation.

13.—*Infantry Combat is generally decided by the effect of fire*, which can be fully developed only in Extended Order. Firing when in line formation is the exception.

14.—Larger bodies of troops in Column may suffer most severe losses within a very short time, when under effective fire of opposing Infantry. This consideration makes it a matter of necessity to confine to the shortest space of time their direct participation in an engagement, whereas the skirmish in Extended Order may last for hours.

15.—*A close formation* has for its object the uniform movement of a greater mass under one command and on a small space. Formerly, the size of such a mass was merely determined by the distance to which the voice of the Officer Commanding might carry. The increased effect of fire now necessitates a further splitting up of closed bodies of troops.

16.—When in *Extended Order*, the soldier is not bound to keep to a certain spot, he also may neglect what he is taught in the setting-up Drill, and a faultless adherence

to the rules of Manual Exercise in handling his rifle. But yet the marksman in Extended Order must show power of judgment, agility, courage, and self-confidence; he must also show dexterity in the use of his rifle, and in taking advantage of any irregularity of the ground, and he must at the same time give undivided attention to the commands of his officers.

17.—The difficulty of commanding a line in Extended Order is increased by having to act in broken country, as well as by the din and other distracting influences of the combat. To meet and overcome this difficulty great care must be taken with the instruction of the men. It can easily be seen in Extended Order, whether a detachment is completely drilled, instructed, and disciplined, for the more the direct influence of the leader in conducting the whole is diminished, the greater are the claims on the independent action of individual soldiers.

18.—The practice of fighting in Extended Order and the proper employment of the formations used is therefore more essential than the use of the column formations. These latter were formerly the mainstay of the Infantry combat, and the extended lines were used only to assist them.

19.—The Extended Order is the formation which is now principally employed in battle; the combat is commenced in that order, and in most cases also continued to the end.

The Extended Order is the essential fighting formation for infantry.

20.—But, all the same, Column formations retain their full importance for the purpose of being kept in readiness as support and reinforcement of the fighting line, as well as for an eventual decisive movement. Without the support of the Extended Order the column formation can never carry on the fighting.

Fighting in Extended Order.

GENERAL PRINCIPLES.

21.—The increased importance of the skirmishing line gives particular value to the capacity of commanding it.

The greater liberty which is allowed to the individual man in moving and in using his rifle is to make him more fit and capable for the requirements of his position as a marksman.

Although the marksman will be taught that fighting in Extended Order will require more the exercise of his faculties than the other formation, yet he must be made to thoroughly understand, *that he can do justice to the demands made on him only by exerting all his strength and capability.* Being allowed greater freedom in moving, he can therefore make the best use of his eyes and ears, and must be ever ready to act quickly, determinedly, and independently.

It is the duty of the officer to awaken in the soldier self-confidence and power of judgment by explanations adapted to his power of comprehension; but first of all he must make him fully understand the fact, *that there is*

nothing more dangerous for a soldier than to turn his back to the enemy.

Movements during the combat.

22.—Every engagement begins with the extending of skirmishers.

The first question then, is to get touch of the enemy, and to preserve for one's own side freedom of action. Therefore the first development of skirmishers must be on a small scale, and must be done without undue haste. But in order to avoid surprise, it is necessary to deploy a weak line of skirmishers in the direction, whence it might be expected, a line such as would be required at the beginning of an engagement. If after all, a detachment is taken by surprise, the first thing to be done is to oppose quickly a force equal to the strength of the enemy's attack, in order to regain freedom of action.

23.—Any further decisions on the lines to be followed will depend on the nature of the engagement, that is, whether it is to be one for the purpose of merely holding the enemy, or a decisive combat. In the latter case, there must be no hesitation to deploy the forces necessary for the attainment of the object, as soon as a distinct idea of their extent has been obtained, and to stake them in a formation which will favour the effective co-operation of all parts. *For there is no greater mistake than to employ forces insufficient for the carrying through of an action with the idea of supplementing them by degrees.*

The advantage of superior numbers would in that case

be entirely and voluntarily renounced, while the fight would be carried on right through with smaller against larger numbers. An unsuccessful attack not only causes useless loss, but demoralises the troops.

24.—Every engagement that is meant to lead to a decision will necessitate the full use of the actual space available which is to be occupied by dense lines of skirmishers.

The space available is conditioned by the nature of the ground and by the position of other troops engaged on the same side.

25.—When commencing an action, for the carrying through of which the C.O. will reserve to himself the further employment of the greatest part of his troops, at first a comparatively short front only is required.

Different degrees of solidity may be given to the first deployment of skirmishers. But care must be taken not to lengthen the front so much that it cannot maintain its full fire effect, or that it cannot be continuously thickly occupied with marksmen in case of a more protracted action and of heavy losses. Accordingly, a *Company of 100 men ought not to occupy a front of much more than 40 yards.*

Also on field-days in time of peace with smaller numbers the same extent of front for a company would be serviceable. This extent is of course greater than in war in proportion to numbers, but the difference is about equalised by the fact that in peace practice the skirmishing line is not thinned by losses.

26.—There is no necessity to pay particular attention to keeping the proper intervals between men in the extended line. On the contrary, especially when the deployment is done in a forward movement without intention of opening fire at once, men must be taught to close, or to make intervals greater, according to the nature of the cover afforded by the ground. Neither the direction nor the pace of the advance must suffer, nor must the total extent of the line be increased.

27.—The careful observance of having the line well dressed is of even less importance than the keeping of the intervals. All that is required is that the single parts of the skirmishing line do not interfere with each other in moving and firing.

But while the advance of smaller units is not yet affected by the enemy's fire, it is permissible (with a view of preserving better command) for the leader to name a certain part of the extended line, with which the other parts are to keep in touch.

28.—If the skirmishing line approaches the position to be occupied for the opening of fire, or if skirmishers are extended directly for the purpose of occupying such a position, the subordinate commanders have to lead their detachments so that the individual men find places most favourable for the use of arms and for cover within the space that is at the disposal of the detachment.

If the flanks are not covered by other troops or natural obstacles, it is necessary to send a few men under a cautious leader as *Fighting Patrol* for observation on the flank.

29.—If the skirmishing line, under supposition of losses sustained, is to keep up the full fire effect, or if this effect is to be increased, or if the line is to be pushed forward, *reinforcements* must be brought up.

Fire.

30.—The fire in Extended Order is the principal fighting means of Infantry. Not only does it effect the repulse of the enemy and prepare the actual attack, but under circumstances is by itself sufficient to decide the combat. In most cases the gradual approach of an overpowering fire concentrated on the decisive points will have such an effect that the final attack will have to be made only against a position either evacuated or only weakly defended by the enemy.

To make a full use of the greatest effect of fire, every man must be cool, collected, thoroughly efficient in the use of his rifle, and accustomed to a good *fire discipline*.

31.—The greatest effect of the fire of entire skirmishing lines consists in the co-operation of the greatest possible number of rifles.

It is not necessary that all the parts of a skirmishing line should always use the same kind of fire at the same time. Particular objects which require a particular kind of fire may be assigned, as occasion requires, to single detachments.

32.—The proper time for using magazine fire is :

- 1) In the attack : the last preparation for the assault :
- 2) On the defence : the repulse of the enemy's assault :
- 3) Repulse of cavalry, and all moments of an action in which a sudden and close contact with the enemy takes place (as when fighting for entrenchments, in villages or in a forest) :
- 4) In pursuit of a retiring enemy.

As a rule magazine fire is only employed at very close ranges. Only exceptionally it may be used at distances between 300 and 800 yards, in cases when the fire at particularly advantageous objects is limited to a short time, during which the greatest possible effect of fire must be attained. In the vicissitudes of combat justifying the delivery of magazine fire, the use of the magazine will frequently be left to the judgment of the individual man. In order that the fullest effect of the magazine may not be spent at the wrong time, the marksman must be properly trained to spare it for the decisive moment, or when a threatening danger must be averted.

33.—For the delivery of fire in any position the rule is laid down that it can only be of decisive effect when it is directed against hostile troops who are well within range. It does not matter very much to which arm these troops belong ; for although in most cases the enemy's Infantry will be the most important and best paying object of aim, one must not hesitate to fire at batteries. Altogether the choice of the object depends on its tactical importance for the time being. Again, the fire

ought to be directed against such objects as, by their height, depth, width and close formation, are likely to suffer most from rifle fire. Well-drilled troops *must be able to keep steady under the enemy's fire without replying to it*, if their own fire is likely to have no effect.

34.—An effect by indirect firing can only be expected in very rare cases, and ought only to be attempted, when the known distance of a stationary object makes an adequate result likely: *e.g.* fire against an enemy holding field works.

35.—As a rule only the officers who are in the fire-line, viz. Company and Half-Company leaders, have to do with directing the fire. In battle the higher Officers have to concentrate their attention on other tasks which they must not neglect by interfering with what ought to be done by their inferiors. It is their business to dispose the necessary forces at those parts of the foremost fighting line, from which an increased or concentrated fire effect is required.

However, in Sham-fights, etc., in time of peace, the higher officers are to have an eye on their subordinates, to make sure that the latter direct the fire properly.

36.—In the course of an engagement it is often impossible to direct the firing perfectly, as a proportionally heavy percentage of the officers in the skirmishing line is sure to be put *hors de combat* when an engagement under fire is protracted. But, even then, the *fire discipline* of the men who are more or less left to their own resources must hold good. In a well-drilled and disciplined

detachment the intelligence of the single man and the example of a few particularly steady and courageous men will have a decisive influence on the behaviour of the firing line, and will make it possible to carry on the engagement successfully against an enemy who is in the same difficult condition.

37.—From the very beginning of the fire combat it must be remembered that the *number of cartridges carried is limited*, and that the expenditure of a certain quantity of ammunition means an expenditure of strength which must only be permitted where it pays. On the other hand, if it has been determined to bring a certain object under full fire, the amount of ammunition required for the attainment of the object of the fight must be fully risked, since fire without effect weakens the morale of one's own troops, and increases that of the enemy. It is therefore a strict condition to economise ammunition, especially at long distances, so that at the decisive moment it may be ready to bring about a successful issue of the engagement.

Movements.

38.—The *movements* of extended skirmishing lines are executed under the supposition of being in touch with the enemy. They therefore require the *greatest simplicity*.

Outside the reach of the enemy's fire it is of the first importance to keep the troops in good order and well together. When moving under fire, the main consideration is how to get at the enemy in the shortest way.

39.—When moving to the front or rear, it is particularly important to keep to the *direction* pointed out. This may be slightly altered by closing to either side as long as the enemy's fire is not yet very effective, but *greater flank movements under hostile fire are not permissible. Changes of front under fire* by wheeling can only be executed in quite exceptional cases. If the necessity arises to form a skirmishing line in a different front, this is done by forming a new line in the intended front from the supports of the skirmishers, whilst the parts of the former fire line no longer employed are withdrawn.

40.—As a rule the movements of the skirmishers are done in quick time. If it is required to gain a certain line or position before the enemy, or to cross ground well commanded by the enemy's fire, the Double is used.

If the distances to be covered are rather extensive, it may be advisable to make a pause after a certain distance has been done at the Double, and to let the men lie down. When arrived within effective range, the farther advance is prepared by the fire of the skirmishers during these pauses. When thus *advancing by rushes*, the parts of the whole fighting unit must keep the enemy alternately under fire, thus affording each other the possibility of moving forward. The length of the rushes will in action be determined by very different circumstances (nature of ground, moral stability of troops, force of hostile fire, etc.).

41.—But with regard to this means of attack, it must be taken into consideration that it uses up considerable

strength and yet easily delays the advance. Another reason for being cautious about using the advance in rushes, is the great difficulty (increasing with every rush) of repeatedly leading forward a skirmishing line which is lying under good cover whilst the fire is most effective.

If in spite of the effect of the enemy's fire it is *possible* to maintain an *uninterrupted advance*, this must be done at any cost, and therefore in practising attack the advance by rushes must be begun at very long ranges, and it must not be practised as the only formation of advance across a level piece of country. On the contrary, every soldier must be made fully to understand that *only irresistible pushing forward* joined with well-considered preparation by fire can ensure success, whereas all long stoppages under fire of an adversary from behind better cover must entail heavy losses, and a retrograde movement is equivalent to destruction.

42.—The most favourable circumstances for the uninterrupted advance are those under which it is possible to keep down the enemy's fire by superior fire from an enfilading (flanking) or higher position.

43.—*Firing while moving* is of limited effect, because cool handling of the rifle, deliberate aiming and careful observation are made very difficult. Therefore it is to be resorted to only under special circumstances, *e.g.* when on the retreat of a skirmishing line it is necessary to prevent the enemy from delivering his fire without exposure to losses.

Closing.

44.—A skirmishing line is closed when the troops engaged have accomplished their object, and the fire on the retreating enemy has been kept up as long as is necessary. In a retreat the line cannot be closed in till after the enemy has ceased pursuit.

45.—Closing must be done with the front to the enemy; if it is done whilst moving, in the direction of marching.

46.—It is not very important in action that each man and each smaller detachment should re-occupy their original place in the greater unit; all that is necessary is that troops are *quickly* assembled in closed order.

Opposed to Different Arms.

47.—In a combat of *Infantry against Infantry* the success depends, not reckoning moral factors, on marksmanship, fire discipline, and direction of the fire. It is the task of the leaders to bring as many rifles as possible into action, or to establish superiority by concentrating the fire effect of extensive lines on the decisive points.

The carrying out of this principle is made easy, if one can find cover against the other parts of the enemy's line.

48.—*The individual foot soldier must be fully aware of the fact that even on open ground he is more than a match for the single horseman if he meets him ready for firing.* He need not even mind a combat against several of them, if he keeps calm and deliberate and uses his rifle properly without taking his eyes off his opponents.

Likewise *Infantry must be convinced that with coolness and firm bearing they have nothing to fear from Cavalry, even if in superior numbers.* To repel Cavalry every formation is suitable which admits of a mass fire calmly delivered and well aimed. Against Cavalry the *bringing into action of the greatest possible number of rifles* is most effective, and therefore only such alterations of formation or changes of front as favour this principle must be adopted. Infantry which do not dare to receive Cavalry in line, the flanks being secured by the fire of other troops farther back, will not be safe in squares.

49.—Skirmishers running are at the mercy of Cavalry, but when firing calmly they may await the attack with full confidence; their superiority increases if the nature of the ground allows of protection and cover. Skirmishers engaged with hostile Infantry must by all means try to avoid taking close formations, even if threatened by Cavalry.

Infantry ought also to be able to advance in the open field without taking any consideration of hostile Cavalry as long as the latter are not supported by superior Artillery or Infantry, or have such superior numbers that they can attack simultaneously from different sides in several successive lines.

50.—Only when particular circumstances require it, does the formation of squares recommend itself as suitable, *e.g.* when a detachment has spent its ammunition, when its firmness is shaken by a previous combat attended with severe losses, or when a retreat is executed

over open country threatened continuously by superior Cavalry.

In all other conditions Infantry fighting against Cavalry must remember that the latter think they have obtained a success, even if they have only forced the Infantry to stop their advance or to assume formations which do not admit of the greatest development of fire.

51.—In fighting against Artillery it must be remembered that this arm possesses a distinct superiority of fire for long, and even moderately long distances. Only at distances of 1000 yards and less is this difference more equalized, and for closer ranges the Infantry has the superiority.

Infantry must attempt, by using natural cover, to get as near as possible to hostile Artillery. The fire must be directed first against the horses if visible, then against the gunners. There are cases when Infantry may produce an effect on Artillery at long distances. Then it is necessary to be prepared for the expenditure of a considerable quantity of ammunition.

But Infantry must never think it their task to try to replace Artillery at long distances or to rival the effect of Artillery fire. Such attempts would lead solely to squandering ammunition.

Use of Intrenching Tools.

52.—In the present time when firearms are so effective, artificial cover attains increased importance. Executed in the proper place it renders important, sometimes

invaluable services to troops and their management. But it is a distinct condition that intrenchments should only serve the purposes of the Commander, and that they do not succeed in directing the latter. This would happen if the work were commenced before the object is absolutely settled. A premature strengthening of the ground therefore is distinctly dangerous and prevents the freedom of movement. It requires good knowledge of Tactics on the part of the Commander to know *where* and *when* intrenching tools are to be used.

The simplest kind of artificial cover is the *shelter trench*, which at first is made for men firing when lying down, and if time allows is deepened and strengthened for men kneeling or standing. When shelter trenches are made for defence, distances on the ground in front must be paced off and marked. Even in the attack, intrenching tools may render valuable services for holding and strengthening lines or positions gained in the attack.

On the Drill-ground and in practices during times of peace the making of shelter trenches must often for various reasons be omitted, even when the assumed conditions of actions would demand the use of the spade. In such cases the trenches must at any rate be marked as though existing.

Duties of Officers and Soldiers in Action.

The Officer.

53.—Commanding and directing becomes more difficult the less a personal influence down to the smallest

units is possible, and the less effectively words of command can be used. In action therefore such means must be resorted to, which are most suitable to the purpose. In the first place the C. O. must make the *choice of a convenient spot*.

Even in sham fights, therefore, all C. O.s are to issue their orders from *that spot* and in *that* very *position* which they *would occupy in case of action*. The directing Officer may always allow himself to disregard this principle for himself, and to insist on it for his Subordinates, whenever and in how far it seems serviceable for the instruction of the men. Mounted Officers will learn, by dismounting occasionally, to know and completely overcome the difficulties of commanding, and they will also thereby accustom the soldiers to see their leaders on foot under hot fire.

54.—As the Extended Order is the one chiefly used, the attention of all Officers commanding greater or smaller bodies of troops must be directed to maintaining connection, order, and supervision. Besides this, the *superior Officers* have to be careful that the troops do not get out of hand, and *all the Officers commanding smaller bodies* must make it their business to join their superior officer quickly, or to place themselves at his disposal after they have carried out the order entrusted to them.

These conditions are fulfilled if the superior officers do *not order more* than they *ought to* or *are able to* order, if the different officers who have to execute a certain order co-operate for the object aimed at and do not

abuse the independence accorded to them, nor indulge in arbitrary measures.

Independent action of inferior leaders within such limits is the fundamental cause of great successes in war.

These conditions are imperative for leaders of even the smallest detachments.

55.—The *leader of the Zug* (each company is divided into 3 *Züge*) has to choose a position from which he can control the fire of his *Zug*. He orders the disposition of his *Zug* in the position allotted to him, and determines the objects of fire independently or in accordance with instructions received. He carefully follows the measures taken by the enemy, and tries as much as possible to work in agreement with the *Züge* adjoining his own in the fighting line. First of all he tries to see clearly how the skirmishing line, or parts of it, can be got nearer to the enemy in the advance, whether and how the enemy can be outflanked or whether a weak point can be assaulted. Also it often happens that the *Zug* leader can see best in the skirmishing line where it is possible to seize a favourable bit of ground or get some other advantage over the enemy. He must then settle with himself how far he may utilise such advantage *on his own responsibility*.

56.—The Section leader assists the *Zug* leader, and is responsible for directing the fire of his men, for the proper use of the backsight, the proper handling of the rifles, the expenditure of ammunition, and the refilling of the magazines.

The Soldier.

57.—The soldier generally goes into battle after previous fatigues and marches, which in war time are often made still harder by privations. Even under such circumstances he is to keep up his energy and courage, to deliberate calmly, and cherish the faculty of taking a decision quickly. He needs these qualities most in the moments of greatest danger; they must therefore be drilled into him.

A man who has been well trained to be firm in character, independent, and regardless of himself, who has gradually accustomed himself to overcome and stand a severe strain of his bodily strength, and who has been well instructed in the simple rules for the constantly recurring contingencies of an action, will keep steady even under the severe conditions of an Infantry combat, and will prove a reliable soldier.

58.—In advancing he must fully remember that he must not halt without orders, however great the losses, however hot the fire. Running away means destruction. On the contrary, *an attack must always succeed if carried on right up to the enemy with firm determination.*

59.—When acting *on defence* the soldier must remain on the ground which he is to hold. He may do so with full confidence, for the nearer the enemy advances, the more destructive becomes his own fire. The man therefore has to save his ammunition for close range, and then to use it, sure of success.

60.—*Every soldier must take care to remain with the detachment to which he belongs.* Whoever is found in the rear of his company without special order and not being wounded, whoever removes wounded out of action without order, is guilty of cowardice. Any one who loses touch with his Company, at once joins the nearest body of troops in the fighting line, places himself under the orders of the Officer or Sergeant in command, and obeys him as he would his own superiors. After the engagement every soldier who has got away from his company must join it again without delay.

61.—Any one who notices that in the pressure of action he is losing resolution and coolness is to look to his officers. If they are no longer alive, there will be plenty of sergeants and brave men by whose example he may brace himself up.

Extending and Splitting up of Troops.

62.—The extension of a detachment is guided by circumstances; either it has to carry on an action independently *or* to fight in close contact with other troops. In the latter case it finds touch either on both flanks or on one.

Also it must be taken into consideration whether a detachment has to attack, defend, or retreat.

63.—The necessity of being compelled to carry on an *independent* action under changing circumstances and through different phases makes it impossible to employ from the beginning the whole force in *one* line.

As a rule it will be necessary to obtain in the *introductory stage* a closer knowledge of the circumstances which will determine how to *carry on* the engagement.

64.—This consideration alone necessitates the *arrangement in two bodies*, the foremost of which must be numerically the weaker, and is employed to introduce the engagement. When the action of this body has cleared up the situation sufficiently to take measures for the continuance of the fight, it will be again necessary to retain a part of the troops as *reserve* for unforeseen contingencies, and for the purpose of bringing about the decision. Thus the whole strength available must be disposed in three successive bodies, and even a further splitting up may become necessary, if particular circumstances, such as an exposed flank, should demand it. But the latter ought, if possible, to be avoided, since a proper use of the reserves renders it for the most part unnecessary.

65.—No stringent and permanent rule can be laid down as to the relative strength of the three different parts of a body engaged. *On principle, the part used for the introduction of an action is to be made as weak as would be consistent with safety, whereas the part retained as reserve is to be as strong as possible.* In general not more than one fourth of the total strength will be employed for the introductory stage, and not less than one fourth will be retained as reserve. But these figures are only to represent an approximate estimate and must not lead to the breaking up of the fighting units.

66.—This assumed subdivision cannot be retained in the course of the fight. First, the part intended to carry through the action will have to co-operate all at once or by degrees with the detachment employed for the introductory stage, and the reserve then will have to be sent forward as required either for the final decision or for covering a retreat.

This splitting up of the different bodies will nearly always cause a lengthening of the front of attack.

67.—On this account therefore the *front development* in the early part of the fight ought to be comparatively small. Otherwise it will be found in the further stages that the front is unduly lengthened or that different fighting units get mixed up too soon.

In taking the first steps for the disposition of troops for action, the question arises, how many lines to arrange and how narrow the front *may* be made.

A detachment fighting independently must remember that deployment of men in front can only further the intended result, if at the same time the wings are protected against outflanking.

68.—In case of a *body of troops fighting in contact with others* the extent of front will mostly be fixed. There is no possibility of expecting or making a flank attack, if both flanks are covered. These circumstances point to a disposition which will strengthen the first line and dispense with a special or particularly strong Reserve.

A body of troops, therefore, that is *supported on both flanks* may justly develop a very strong front; if *only in touch on one side*, the supports and reserves will in most cases be arranged on the exposed flank.

69.—Our Infantry,* so well instructed in shooting, is able to repel by their fire *any attack in front*. The attacking force will suffer such enormous losses that they will be thoroughly shaken and broken, and once repelled will hardly renew the attempt.

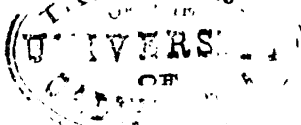
70.—Infantry which does not mind losses sustained by fire at long ranges and opposes a deliberate fire to the assault of the enemy, is so strong in front, if it makes good use of the advantages offered by the ground, or created by the spade, that it can do without an immediate (direct) support.

71.—There is *one* vulnerable spot, and that is the flank. This is vulnerable, if not secured by the nature of the ground or by other troops.

Thus the *securing of the flanks* is of the greatest importance as regards the result of the combat. The most effective means to secure a flank is a *disposition of troops in several successive lines*. But for the object in view the position given to the detachments kept back as reserves is of the greatest consideration.

72.—If *behind the centre of the front*, the reserves may easily suffer heavy losses at an early stage by the fire poured into the advanced fighting line. In order

* *i.e.* the German Infantry.



to withdraw them from this contingency, they must be kept back so far that their timely employment becomes doubtful on account of distance.

73.—Therefore, if special circumstances do not demand otherwise, *it will be most serviceable to place the reserves behind the flanks of the advanced fighting line.*

74.—It depends on position and nature of ground to determine behind *which flank* the Reserves are to be disposed. The flank which is most likely to play a decisive part must be looked after first of all.

It must be remembered that the shifting of reserves towards flanks means the loss of much time, and has for the most part to be executed under the enemy's fire.

75.—The *distances* for supports and reserves depend on *the object of the engagement.*

Before approaching a decision, troops in close formations must be withdrawn from fire as much as possible.

If it is intended to bring the engagement to a decision, the distances must be decreased gradually. Then all the leaders, even those of the smallest units, must show but one endeavour, *viz., to be in front*, so as to be able to help in gaining the victory. The duration of the crisis is mostly short, and troops that have not been employed till then must be disposed and used without the slightest loss of time.

As long as a decision is not yet aimed at, the distances in depth must be greater.

76.—Again, the distances must vary according to the nature of the ground.

Open ground necessitates greater distances, and under the enemy's fire broader formations (strong skirmishing line with line formations in rear). If, in advancing, the lines in rear cannot be withdrawn from the enemy's fire, care must be taken to avoid one Infantry volley or one shrapnel hitting two successive lines. The required distance is thereby increased to more than 200 yards, and must only be decreased when the decisive moment approaches.

Broken ground allows shorter distances. The leader must be all the more careful not to neglect this advantage, as a sudden and rapid reinforcement of the front line is more frequently necessary on such ground. A small front, short distances, closer formations, and strong flank reserves are what are required. This is particularly the case for combats in forests, when closed bodies of troops can only be moved along the roads.

When *fighting in the darkness*, the importance of all the features of the ground is considerably altered, and it is impossible to direct the aim on decisive points. For movements of attack a distinct object must be marked beforehand; there must be no change in the direction of the movements, and they must be limited to short distances over a known and not extensive piece of ground. In the simplest formations of Companies in Column (3 Züge) by the side of, or behind each other, with but few skirmishers close before the front, the attack is best prepared for the hand-to-hand fight, or it is possible to carry on a short energetic fire combat as the heads of the columns are so close.

Any more complicated arrangement for the attack would be liable to create confusion.

When on *defence*, it is required to hold out in the position occupied without altering the disposition of the troops. The fire combat is to be limited to close ranges, and must be short and sharp; during the day-time precautions must be taken to ensure the full command by fire of the roads leading up from the enemy to the position occupied. If then a body of troops think themselves particularly exposed to a night attack, the front line must be strengthened to ensure greater safety. The co-operation of troops nearest to those attacked at night time is limited to unexpected counter-attacks in flank.

77.—On the Drill-ground the distances in depth have often to be shortened on account of the space available. If this is not necessary, the distances ought to be fixed in accordance with the requirements of warfare, because such an arrangement would be of great advantage for the instruction of leaders and troops.

78.—*Troops in closed bodies have to be guided in their movements by those of the skirmishers.*

Whenever they are led up to the skirmishing line, the decision may be expected to be at hand. They may be used to reinforce the fire line, or to deliver the attack in a closed body.

The object of the combat, the time at disposal, and other considerations decide in which way they are to be used.

Attack and Defence.

79.—In the *Attack* there is a great difference between (1) an engagement with troops met with on the advance (*Rencontre*), and (2) an attack against a front disposed and prepared for resistance.

80.—In a *Rencontre*, so frequent with moving armies, the troops are deployed from columns on the march, mostly against an enemy likewise engaged in deploying.

In such engagements the heads of columns must by their action give time and room for the columns to form up for fighting.

Subordinate leaders must in such cases act independently as far as possible, without endangering the connection of their detachments with the movements of the main body in deploying. In this sense the Company acts as the head of the Battalion, the Battalion as the head of the Vanguard. On one hand, it is necessary to form up for fighting more quickly than the enemy, on the other hand it must not be done too quickly, so as not to be obliged to begin the fight sooner than might be agreeable with the intentions of the C.O.

It is evident how important it is that the C.O. should be at the head of the column at the commencement of a *Rencontre*, for then the orders for the deployment and for the combat can be issued at the same time.

The attack must be delayed by the deployment as little as possible; previous deployment on the front line of the leading company tends to loss of time. The

introductory phase of our battles will mostly be carried out in this way.

81.—If the enemy has nearly completed his dispositions for the engagement, or if he is already partly in position, the deployment of the head of a column must be carried out with greater caution. The deployment must be continued so as to obtain a greater breadth for the fighting formation, and the orders of the superior officer must be waited for. This officer must without question be on the spot, to issue his orders in time.

82.—*The Attack on a fully developed front of defence* (especially when *prepared* for the defence) must be carried out from the very beginning on the plans of the C.O. The independent action of a single officer must not be allowed to expose the general dispositions to the influence of chance.

The enemy in such a case has evidently renounced an attack in first line, so that the C.O. of the advancing force has obtained the advantage of choosing the direction and the nature of the attack. In such a case therefore, the troops are first fully formed up in accordance with the intentions of the C.O., before any part may begin the engagement.

The difficulty of crossing ground commanded by hostile fire may make it advisable to use the darkness for the approach. In such a case an advance will generally be made on the previous day up to the limit of the effect of the hostile fire, and towards morning the

troops of the first line will be led forward in the dark so far, that with the beginning of dawn firing may commence.

The only prospect of success of a planned attack is to attain *superiority of fire*.

First of all, the superiority of Artillery fire must be established, as it has to open the way for the attack by Infantry. If on the ground in front of the attacking force there are useful *points d'appui*, the attack has to gain them on the first line. Under the protection offered by such *points d'appui* the further developments take place. It is a settled principle to bring the leading troops as near to the hostile position as the nature of the ground admits before opening fire.

Strong lines of skirmishers will try to work their way up to the hostile position and to weaken or defeat it by their fire. It is advisable to take the skirmishers from the Battalions or Brigades which are intended to carry out the attack. If the skirmishers have approached close to the hostile position, the supports must be held ready for an immediate intervention as near as possible behind the skirmishers.

As long as the superiority of fire has not been attained, or as long as the enemy does not seem considerably shaken, the execution of the attack is only possible under great loss. The superior effect of the fire then must be awaited before delivering the final attack. The skirmishing line can judge best of the results obtained; they feel first when and where the resistance of the enemy grows weaker, they are able to make the

quickest and best use of all advantages, so that the initiative for the delivery of the attack will frequently come from this quarter. If such is the case, the supporting or closed bodies must at once follow the skirmishing line, so as to support and secure it against the chance of counter attacks. But, in general, the Officer commanding the whole force will have to take such measures that the order for the assault will be given by himself. When the skirmishing line has gained close distance, and, continually reinforced, has sufficiently prepared the assault by the greatest effect of fire possible, the successive lines in rear must be led up to the first line by an uninterrupted advance, so as to bring about the decision in connection with the skirmishers. Drums are beaten in all closed bodies of troops from the moment when the advance can no longer be concealed from the enemy. Whether at such a moment the bodies of troops are by the side of, or behind each other, what formations they are in, and whether the Commanding Officer be able to keep a reserve, all this depends on circumstances.

In this crisis of the attack there can be only one aim for the attacking line, only one idea, viz. *forward*, straight at the enemy. The beating of the drums and the incessant sound of the *advance* by all the bugles makes all forces at hand move forward, and the attacking troops throw themselves with Hurrahs on the enemy.

Any further formulating of the Method of Attack is forbidden.

83.—*How to proceed after a successful attack.* It is not sufficient to have conquered a hostile position, one must make sure of holding it. This implies pursuit of the retreating or retiring enemy, and securing the objects gained. If villages, farmsteads, woods are included in the hostile position, the attack must be continued without interruption up to the farther boundary of such objects. The farther pursuit is generally not carried out by immediate continuation of the attack movement, but in first line by fire, whilst the troops who have made the assault occupy the conquered position and at the same time re-form their different units. In this way they become in a short time ready for renewed fighting.

84.—*Outflanking* is the easiest way to obtain that superiority of fire which is indispensable for a successful attack. But it must be prepared already in the first deployment, either by marching up in different lines or by advancing lines in rear to a flank of the first line.

There is no chance of success in trying flanking movements in the foremost line with parts of bodies of troops already extended, or perhaps even fighting; such attempts would only result in splitting up the forces in a dangerous manner.

85.—*The Defence.* No kind of fighting depends so much on the nature of the ground and country as a successful defence, which requires villages, heights, ravines, woods, defiles, etc.

At every defence the utmost use of the rifles is requisite.

From this point of view the position must be selected and artificially strengthened.

As soon as the direction of the enemy's attack has been found out, the firing line will, from the first, be made as strong as seems necessary for the holding of the position in accordance with the object of battle and the nature of the ground. Shelter trenches will be made and other means of shelter provided, distances of important points in front will be ascertained, reserve ammunition from the ammunition carts will be brought up and distributed to the troops, who will put it where it will be ready at hand after occupying the line of defence. The supports are moved up close, sometimes drawn up close behind the skirmishers. All distances in depth are to be shortened, reserves are only to be withdrawn far enough to be out of the reach of the enemy's fire, but near enough to be at hand for the defence of the portion allotted to their main body.

The number and width of the different lines of the defensive position will differ very much with the natural conditions of the position. The more difficult the ground is to move on and to overlook, the more numerous and the smaller will be the subdivisions of the position. The occupation of a position thus arranged demands as first condition the disposition of troops in depth. Every subdivision is allotted to one fighting unit of corresponding strength, which provides its own reserve.

To find the proper place for the *general reserve, i.e.,* such

forces as are not intended for any particular subdivision, the following considerations must be taken into account: a defence which only intends to repel the enemy (as in outpost and rear-guard engagements) may be limited to holding its own ground; whereas a *defensive action which is intended to bring about a success of arms*, must be coupled with offensive measures. Defence alone can never lead to destruction of the enemy. Therefore the forces for the defence of the local positions must be rather moderate and the general reserve must be assembled at a point which is most likely to favour an offensive movement at a given moment. As a rule, this will be at one of the flanks, and this choice also guards best against that most dangerous enemy of strong positions, outflanking. The greater the body of troops on the defence, the greater must be the lateral distance of the general reserve, which will give room for deployment and for advance of the eventual attack, will threaten the flank of the enemy's attack, and will increase the protection against outflanking.

Care must be taken not to complete the occupation of positions before the direction of the enemy's attack has been ascertained.

86.—No regulations can be laid down for a *retreat*, supposing previous defeat. Any body of troops engaged with the enemy has no longer the choice of the direction of retreat when repulsed or withdrawn from an unsuccessful attack. If the enemy pursues, the troops must retreat perpendicularly to the front without change of formation and they require to be received behind a

supporting line to prepare for renewed resistance. This fact shows that the order for retreat can only be executed when the troops are still in formations to depth. But it must be well considered that it would be wrong for troops brought up for a decisive combat, *to keep a reserve for the cover of their own retreat instead of using it to carry through the engagement.* The Commanding Officer must decide in time whether he will accept the decision or carry out a retreat.

The position to be taken up by troops for receiving a retreating body has to be chosen in accordance with the capacity for resistance, but above all it must be sufficiently near so as not to expose the retreating line to destruction. A position for this purpose is always more favourable when sideward of the line of retreat. The Officer in command takes from the fresh part of his troops the detachments intended to occupy that position. Then the enemy finds resistance which must be made so that the retreating troops gain time and space to re-form on their now unmolested farther retreat. This determines the duration of the resistance, after which the receiving troops themselves have to commence the retreat unless a turn of events can be hoped for from the timely intervention of fresh troops. In most cases it will be necessary to prepare and arrange a second position behind which to retreat in turn.

A well-conducted engagement of troops in retreat must finally lead to the formation of Columns on the march with a rearguard arranged in successive bodies. In order to carry this out the Officer Commanding will

have to indicate plainly the point to be marched on, and to order where, and by which detachments the relieving positions are to be occupied. He will only be able to accomplish this task, if he leaves the battle-field after issuing these orders and receives the retreating troops at the different relieving positions with the special orders for each. For everything else the Subordinate leaders are responsible. To present a front to the enemy at random for the sake of supporting a relieving position is often a fatal mistake, as it greatly increases the difficulty of getting away from the enemy.

87.—The regulations give no rules or points of view for all possible kinds of combats, they say nothing about feints, *retardive* or *demonstrative* engagements. How to conduct them is the task of the Commanding Officer in each case, and their conditions will vary entirely with different circumstances. It will always be a case for the consideration of the Commanding Officer to decide whether troops have to be arranged in depth or breadth.

B. Combat of Fighting Units.

Company Combat.

88.—The Company must be able to execute at a short order or wave of the hand all regulation formations, such as extending, closing in, and a rapid change from one formation to the other.

Fighting in Extended Order implies the condition that

each Zug and each Section can independently find the means to execute the tasks allotted to it or resulting from the circumstances of the combat. An extended Zug closes and joins without further order the Company in Column as soon as the object of the engagement no longer requires the Zug to remain in Extended Order. A Section, when having executed its task, acts in the same way, and after closing, joins the remainder of the Zug. This principle must become custom by practice. The Zug leader receives the order to extend, and at the same time he is given the command of his Zug. In the course of the engagement there is often no time and more frequently no means of transmitting an order for changing front or closing. At the end of the combat therefore each Zug and each Section must be found in its proper place; where this is, cannot be fixed beforehand.

89.—The Company is only exceptionally (when detached) under necessity of having to carry through an engagement independently; as a rule it fights as part of the Battalion unit. Whereas the Company leader when detached, has to act exclusively on his own responsibility so as to carry out his orders, he has to consider in his disposition his relation to the other companies when acting in the Battalion unit. This means that the Captain must have an eye on what happens on his flanks and behind him, although the conditions and events to his front particularly occupy his attention.

The combat of the Battalion is an *ensemble*, the

frame of which must not be overstepped by any of its parts. But even within this limit the independence of the company is great and indispensable, as soon as it has entered into action. Orders coming from far in the rear are easily rendered unsuitable by events. Continual waiting for orders would make it impossible for the Company to act in the right way and in proper time. The decisions of the Company leader, however, must always be ruled by the principle that connection with the Battalion, and the proper place within it, must be kept up through all the changing circumstances of a combat.

90.—When *entering into an engagement* it is advisable to employ at first a weak skirmishing line, because changes of front with strong skirmishing lines are always difficult to execute, and are attended by loss when under the enemy's fire. As a rule, whole Züge are employed for the fire line only gradually, one after another. It will be required only under particular circumstances to extend several Züge at the same time; again, in cases when the Company is only to be assured against surprises, the skirmishing line may consist of merely half a Zug, or of even a smaller body.

91.—The *development of the combat* demands the increase of fire effect in the first line, as well as the compensation of loss sustained. The skirmishing line of a Company may for this end be lengthened or be strengthened by bringing into it fresh forces. The former way must be chosen where possible, as it favours

the proper command over, and the direction of fire in the different small units. But the latter way will be resorted to more frequently, because there is seldom room for lengthening the skirmishing line on account of other troops fighting next in line. A Company must therefore have been drilled so that the hold over the men is not lost when the skirmishers of different Züge and sections are mixed up in the same line. The leaders of the Züge share the length of the line between them ; subordinate leaders act similarly.

92.—The breaking up and extending of the *whole* Company must be avoided, or postponed as long as possible, otherwise the Captain will have it no longer in hand when attacking, and even when in a position, he will not always have it under complete control. Still more the Company would be withdrawn from the control of the Battalion leader. The Captain must therefore endeavour to keep a closed body behind the skirmishing line as long as possible, which alone will enable him to make up for losses, to give greater effect to attack or defence, or to repulse a threatened movement against a flank.

93.—As a rule a Company which has extended Skirmishers will keep the remaining part in a closed body as *support*. To arrange for a weaker support as connecting link between skirmishers and main support will only be necessary when it is important to keep a similar body in greater proximity to the skirmishers. Likewise, the consideration of covering a flank may

necessitate the disposal of special detachments behind one of the wings of the skirmishing line. But such subdividing is a drawback, which must only be risked in exceptional cases.

The distances in depth of the closed parts of a company depend on the state of the combat and the nature of the ground. *The timely support of the fire line must be assured.* The choice of formation also depends on the nature of the ground and the effect of the enemy's fire. If in view of the enemy, line formation is advisable, whereas columns find cover more easily in the undulations of the ground.

94.—*To carry through the combat the whole strength of the Company must be put forward, if necessary. Whether in this case all are drawn into the first line, or whether closed bodies also are finally employed, depends on circumstances. At any rate the force of the fire must be raised to the utmost, and be maintained if possible until the decision is arrived at.*

A Company fighting independently, which has to keep up its divisions and flank-cover to the last, will use the support most suitably as a closed body, in attack as well as in defence. When Companies act as *parts of a Battalion*, they will share the different exigencies of the attack or defence.

The assault is made, after obtaining the desired effect of the fire, on the command of the leader, by a quick rush at a point in the hostile position which has been pointed out as the object to go for.

95.—The Captain must keep in hand the direction of the movements of his Company during the combat. He communicates his dispositions to the Zug leaders by means of short clear orders and must keep his place where he thinks he will be able to direct his Company. He must look after getting fresh supplies of ammunition and distributing them by all means at his disposal.

Combat of the Battalion.

96.—The Battalion possesses in its four Companies a disposition and division of strength which make it peculiarly adapted to the execution of all the requirements of an engagement.

The Major manages the Battalion by allotting their special tasks to the different Companies. Only in case of evident misunderstandings or mistakes in selecting order of procedure, which might enforce movements not intended, will the O.C. the Battalion directly interfere with Companies, Züge, etc.

On entering upon an engagement the C.O. of the Battalion has to issue his orders in short, precise, and distinct manner to each of the company leaders—if possible in presence of all of them—but he has to leave to them the choice of the means and measures to be adopted. He is to be guided by the same principle during the course of the action. It must be his main endeavour to keep up the connection between the companies whilst engaged. The companies also in executing their tasks endeavour to keep up this connection.

The Officer commanding the Battalion has often not sufficient time, often not the means for transmitting an order at the right moment. But, all the same, the end of the engagement must find each company in its right place. Where this is, cannot be fixed beforehand.

97.—The C.O. of the Battalion will in most cases find it advisable to avoid as long as possible extending whole companies; for when they are entirely extended, he cannot keep them in hand in an attack and even in the defence of a position he can no longer control them as one unit. In case strong, thick skirmishing lines are required, it will be preferable to employ at once several Companies who keep their own supports. By doing so it is possible to avoid different Companies being mixed up at an early stage.

98.—The formation of the Battalion depends on the object of the action and on the nature of the ground. There is no generally applicable principle to determine, whether a Battalion should take parts of all four companies into the first line or only one, whether it begins an engagement with one, two, or three lines disposed as supports. The C.O. has a free choice according to circumstances.

The Battalion may deploy entirely for action by making a sort of line formation on a given company, or it may be done by bringing one company to the front. The former movement will be rare, but will have to be practised.

None of the different formations may become a fixed scheme.

99.—In most cases it will be advisable to deploy the Companies only when each is needed, and to keep the remainder of the Battalion in hand. If, for instance, a “Rencontre” is commenced by one company in front, and it is later on found necessary to extend the front to one flank, a second Company is employed to do it. When it is seen in the course of the engagement on which flank the greatest force must be disposed, or which flank is threatened, then the reserved forces are arranged in successive bodies behind that flank. There may be a great variety of circumstances to determine the way in which the four Companies may have to co-operate. The Battalion leader will always be equal to all different circumstances, if he keeps to an arrangement of his forces in depth, and if he uses his Companies only when he has clearly recognised the necessity of any new movement. He must bring into action *sufficient* forces in the *right time*, but he must guard against any hasty expenditure of force.

100.—The movements of the Battalion when once developed are to be regulated by marking the common object on which to march.

The greatest breadth in which a Battalion could be disposed would occur in case of all four Companies being formed up by the side of each other. *But it is evident that in such an arrangement the leader of the Battalion has*

given up an essential part of the influence he ought to exercise on the course of the action. Also there is seldom space for such a breadth of formation for a Battalion which fights by the side of others. But if a Battalion fights an independent action, in which case space would be available, it is frequently necessary to have a small front and an arrangement of greater depth. Therefore on the whole the fighting front ought to be rather small.

The necessity for disposing bodies in depth is greatest, when in positions of defence, when a Battalion is fighting independently, and always at an introductory stage. The smaller the fighting front is, the more the lateral distance of flank echelons must be increased.

101.—*To carry through the engagement,* the Major can only dispose of the reserved force, which is either behind the centre or behind a flank. He has to choose his own place under consideration of this circumstance. Only in exceptional cases can he be with the front line; he must be as much as possible close to his reserves, in any case at a spot from which he can well overlook the fighting of his Battalion.

His influence on the fire-action of his Companies will always be limited; generally he cannot do more than regulate the supply of extra ammunition, so that it is taken to those points where the need of it is greatest.

102.—If a Battalion is brought up from the Reserve for the purpose of pushing to final conclusion an

engagement which has been prepared by the fire combat of other troops, it will be advisable to make full use of the advantage accruing from its closer formation.

In such a case it will be expedient for fighting to extend the Companies with short intervals.

Combat of the Regiment.

103.—The Regiment is particularly adapted to carry out objects of fighting allotted to it as a unit, through its historical associations, through the uniformity of instruction, through the close relations amongst its officers, and through the number of its divisions: three or four Battalions. Within the regiment, the impulse for co-operation will be most active, and its subdivision makes it easy for the leader to calculate exactly the numbers to be put forward at every phase of the fight.

The leader addresses his special orders to the Battalion leaders, and leaves to them the manner and form of executing them.

A direct interference with the action of single companies must be limited to exceptional cases, and is only justified when the carrying out of the general plan seems seriously threatened by the proceedings of the subordinate commanders, and when there is no time to transmit the order through the usual channel.

The leader secures his influence on the action of the Battalions in the foremost line in the most efficient manner, if he assigns to them certain parts of the front when on defence, and if he prescribes to them the objects to move on when marching or attacking. According to circumstances the latter can be done in three ways: either a common object is given to the Battalions to march on, which must be sufficiently distant in front, or a particular object is assigned to each Battalion, or finally the direction of the march respecting the attack is fixed for one Battalion, and the others are ordered to keep in touch with this one.

The co-operation of Battalions fighting by the side of each other can be regulated by pointing out an object in front, never by dressing one Battalion on the one next in front. Although therefore Battalions fight in the same line without taking up their dressing from each other, there will frequently be the necessity of the order to get touch in the fighting formation towards the centre or one of the flanks.

104.—Only the forces kept back as reserves are at the disposal of the Colonel to further develop his action, either in breadth or depth, according to the requirements of a certain stage or to the plan laid down. He will never give out of hand more Battalions than is demanded by the gradual development of the action. Thus he retains the command over the portion of the battle-field assigned to him, and keeps well prepared

for the contingencies of the combat. This arrangement only will allow of a flanking movement being made, or of the repulse of an attack in flank. A change of front can only be executed by employing Battalions kept in the rear and disposed in depth ; Battalions already engaged are bound to keep their fighting front. The difficulty of drawing to a side the foremost fighting line increases in proportion with its numerical strength.

The front line in which the fighting is to be done must be fixed as accurately as possible before the Colonel orders the first deployment of any Battalion for the combat. The arrangement of formations in breadth or depth depends on the main front line, and on the connection with other troops on the same side. The narrower the first development in front, the greater the lateral distance of the successive lines kept in reserve.

105.—It makes a great difference whether a Regiment enters an engagement when in Marching Column, or when in its usual regimental formation. When deploying from Marching Column the leading Battalion may be already fully engaged, whilst the one next only arrives on the battle-field. This case requires arrangement in depth with the leading Battalion, and the following Battalions must form up in Columns as quickly as possible so as to shorten the depth of the whole Regiment. Even when advancing to occupy the position pointed out by the Colonel, the Battalions must already be forming up from the Marching Column.

106.—If a flank march becomes necessary in front of the enemy's main line, it cannot be undertaken with sufficient safety, unless the timely deployment in a suitable disposition towards the enemy is prepared by the arrangement of the troops on starting. Within effective range of the enemy such a flank movement can only be executed under cover of the ground.

107.—A normal extent of front of the Regiment cannot be fixed. The breadth of the front depends on the object of fighting and on the nature of the ground, as well as on the strength of the forces of which it forms a part. But if a Regiment carries on an engagement by itself, its extent of front at first must not exceed the length of line occupied by two Battalions deployed for fighting by the side of each other.

108.—In carrying an attack right through, the movements of a Regiment when once deployed are, on principle, directed straight ahead. Any closing to a side, when required at this stage, shows that there was a mistake in the first deployment. As a rule, it is better to correct such a mistake by drawing forward the successive reserve lines arranged behind a flank, but nearly always the force of the attack will be weakened in consequence.

109.—In order to do what is required of him, the Colonel of a Regiment has to choose the most suitable spot for himself. During the introductory stage he will be well to the front. Especially in case of

“Rencontres” the front is the place where he is required. For the direction of the later phases of the combat the most suitable place for him will be near the reserves, in fact anywhere whence he can secure a full view of the troops under his command. In case his Battalion fights as part of a Brigade, he must remember in the choice of his place that he must be in easy communication with the leader of the Brigade.

Combat of the Brigade.

110.—The Brigade is the greatest unit for fighting and commanding which can be practised and drilled on a limited space.

A Battalion on war footing with Small Baggage occupies in Marching Column a depth of 400 yds.; hence the extent of a Brigade on the march is so considerable that the arrangements of fighting formations are sometimes forcibly ruled by this fact. The Commander of the Brigade becomes dependent on the length of time required for deploying, and it is therefore important to keep in sight the difference between the length of Marching Columns on war footing and that of the same columns in times of peace.

111.—A Brigade (2 Regiments=6 Battalions) is best arranged for the Combat when the two Regiments fight by the side of each other, share the battle-front and determine the forces gradually brought up by their indi-

vidual requirements. But this ideal arrangement cannot be always made from the outset; also more important tactical considerations must not be sacrificed to it.

112.—Especially in a “Rencontre” fight, the requirements of the first fighting line may urgently demand an accelerated increase of breadth, and thus bring the majority of the Battalions of the leading Regiment into the first line by the side of each other. Such circumstances make it indispensable for these Battalions to provide for being separately arranged in depth formations; for the leading Regiment must never *assume* that the one following it would be kept at disposal to support it in its own front. *In all cases it must be a fixed rule that the regiments receive their separate orders, and that the Brigadier only gives his orders to the Regiments.* Mixing up regiments is a disadvantage, and must only be resorted to in cases of absolute need.

The Regiment second in the Marching Column will in most cases march up behind one of the wings of the one already engaged; it will have to be kept all the more concentrated for a decisive advance, the more the circumstances of the case at first necessitate a rapid extension of front.

113.—The Brigade, by means of its fighting power and its size, is a force of such consequence that it may be required to act on different fronts simultaneously and uniformly. The deployment in the different directions of march must be made from considerable depths. A

lateral moving of fronts once deployed is no longer admissible.

When marching up into action, the Brigadier must take care that the depth of the Brigade is decreased in good time, by forming up the Battalions and making the successive lines close up. Any halt will be used by each subdivision so as to avoid useless delays in the deployment of the whole body.

When the Regiments receive their orders for the combat, the objects of attack or the portions of ground to be defended will be then assigned to them. The more concentrated and uniform these are for the same regiment, the more concentrated will be the co-operation of the forces.

114.—The choice of his own position is of great importance for the Brigadier; he will have to change it as little as possible.

The commencement of a battle must find him at the head of his brigade, because his own observation of the circumstances concerning enemy, nearest troops on the same side, and nature of ground, cannot be made up for by reports received or by consulting a map. In that position he is best able to direct correctly the first development, on which the course of the fight depends so much, to obtain advantages over the enemy by timely resolves, to save his own troops long détours, to lead their action into certain lines, and to preclude the possibility of arbitrary decisions on the part of the O.C. the leading troops.

But during the further course of action the Brigadier keeps far enough back to overlook all parts of the brigade. As a rule he will find the most convenient position near those bodies of troops which he has retained for his own disposal. There only can he command the action as it is going on. On principle he addresses his orders to the Commanders of Regiments. But if circumstances force him to deviate from this rule and to send direct orders to a Battalion for the sake of executing certain movements which require great rapidity, he must at the same time send information to the Officer Commanding the Regiment, with whom he must remain in constant uninterrupted communication.

115.—In other respects the combat is carried on in accordance with the rules laid down for Regiments and Battalions.

116.—Experience in past wars will show the average frontage to be allotted to a Brigade in action.

The fighting breadth of a Brigade of 6 Battalions ought to be about 1000 to 1200 yards in the first deployment.

C. Final Remarks.

117.—The simplicity of forms and principles in the regulations must have a good effect on the thoroughness in instruction.

They suffice for the necessary uniform Drill and Instruction of the Infantry of the whole Army, and their

simplicity makes it likely that Reserve men called out to serve with the colours will find it easy to master them again in a very short time. But rigorous care must be taken, that *the smartness and discipline as taught on the Drill-ground must, as far as exterior circumstances allow, be maintained in sham fights and on the field of battle.*

118.—The points of view mentioned offer abundant changes for the practice of fighting formations. Under supposition of the most simple conditions of war, the principles of deployment for attack, defence, retreat or flanking movements have to be shown, practised and clearly impressed on the men; they have also to be practised with or without lateral support by troops or ground, whilst changing front, and finally on the Drill-ground with or without utilisation of the nature of the ground.

119.—A Commanding Officer has the duty of practising all the principles laid down by the regulations during the period of time that he is allowed for the complete Instruction and Drill of his force.

120.—At any Inspection the Inspecting Officer sets the task. This is the only way by which he can form a right judgment on the tactical efficiency of the body of troops, and particularly on that of the Officers of all ranks.

121.—Officers are reminded that these forms and principles only take into account the simplest conditions and will often have to be altered by different

circumstances, when employed in face of the enemy. In case the contingencies of a battle demand a deviation from these rules, all Commanding Officers, each in his position, must be accustomed to adapt their orders quickly and without hesitation to the case in point, and they must well remember that *omission and neglect is a greater fault than a mistake in the choice of means*. Their attention must never be detracted from the essential point by a tendency to stick to fixed forms.

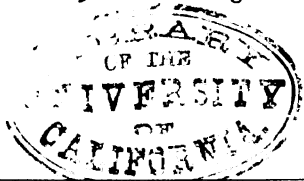
122.—In all Sham-fights as well as in the course of the complete Drill Instruction care must be taken that the inclination for attack which is innate to Infantry be kept up and maintained.

As soon as a fairly open ground for the use of the rifle presents itself, and as long as circumstances do not make it necessary to come at once to decisive action, Infantry must try to make full use of the superiority which is attained by a calm deliberate fire of stationary detachments. All Infantry must therefore be accustomed to develop their fire to the utmost, even if only for a short time, at any moment and at any turn of the action, so as to be able to attack the enemy with all the more vigour and effect.

123.—When practising larger bodies of troops in open country, it is of much importance to consider the proper times when forces ought to be spared. This consideration ought to recommend itself to the attention of all Commanding Officers all the more, as in case of real need advance at all hazards, extreme exertion and self-sacrifice must be expected of troops.

124.—The greater the dimensions of a battle, the greater the field for the action of the individual. The attention of the leaders must be more directed to the execution of their special task within the frame of the *ensemble* than to the superintendence of details. Therefore it is not very important, that all parts of a larger unit should use the same means to attain the one object in view. But the free action which is allowed to subordinate leaders must never endanger the safety of the higher direction, and it is indispensable under any circumstances, that the tactical order and the internal unity of troops must not be lost.

125.—More extensive practices in connection with other arms lead to a number of tactical contingencies and decisions which are far beyond the limits of the Regulations. *They* do not intend to exhaust the laws of Tactics, they are limited to fundamental principles. But troops will be equal to any task in case of war if they have fully mastered by practice the principles of the regulations. Their instruction has been carried out from the right point of view, *when they can do what war requires of them, and when they have not to abandon on the field of battle what they have been taught on the Drill-ground.*



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